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010-04-002

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EXAMINER

PARKER, BRANDON

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/801,756
Filing Date: March 16, 2004
Appellant(s): ANDERSON, THOMAS G.

V. Gerald Grafe
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01/07/2008 appealing from the Office action mailed 05/03/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,054,989

ROBERTSON

4-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Robertson et al (US Patent No. 6,054,989) ('Robertson hereinafter')

With respect to claim 1 and 2,

The claims are being viewed as: an application and personal domain can be used interchangeably being that application domain characteristics can differ from other application domains just as personal characteristics differ from application domain characteristics no matter the function since application domain characteristics can carry the same functions and characteristics as a personal domain

- A graphical user interface (**i.e. human-computer interface**) in which object thumbnails are rendered on a simulated **three-dimensional** surface which (i) exploits spatial memory and (ii) allows more objects to be rendered on a given screen (**i.e. display space**). The objects may be **moved**, continuously, on the surface with an **input device**.
- users to drag documents in the **X-Y plane**, and also push and pull documents in the Z-dimension (**i.e. z-coordinates , z-device, z-display**). (i.e. having mutually orthogonal x-display and y-display dimensions, where x-display and y-display together define a plane orthogonal to a user direction of view into the display,

and a z-display dimension orthogonal to both x-display and y-display) It is inherent that X-Y will be mutually orthogonal to Z. (Specs Col 5 lines 60-62)

- When a user activates a hyper-text link, for example by clicking a **mouse (i.e. input device)** when a displayed cursor coincides with the text **(i.e. display space) (Specs Col 2 lines 43-45)** determines a cursor location based on the accepted inputs **(Claim 10)(i.e. Establishing a correspondence between motion of the input device and motion of a cursor relative to the display space)**
- As the object (e.g. information or content) thumbnails **(i.e. personal/application domain)** are moved about the landscape, the present invention may employ perspective views (perceived image scaling with distance), partial image occlusion, shadows, and/or spatialized audio **(i.e. interface characteristics)** to reinforce the simulated three-dimensional plane or landscape hence when an object thumbnail being "moved" **(i.e. motion of a cursor into)** is close to a pre-existing cluster of object thumbnails **(i.e. application/personal domain)**
(Robertson Specs Col 6 lines 56-65)

With respect to claim 3 and 6,

- Although the **three-dimensional (i.e. x-device, y-device, z-device space)** room metaphor exploits, at least to some degree, a person's spatial memory, the person has to manipulate objects or *move to* disambiguate **(i.e. crossed an application to personal)** images and reveal hidden information. **(Robertson Specs Col 4 lines 18-22)**

With respect to claim 4 and 7,

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- determines a virtual location environment of each of the objects in the three-dimensional **(i.e. x-device, y-device, z-device)** environment **(Robertson Claim 10)**
- generates an animation moving the visual representation of the associated object **(i.e. application surface/personal surface)** to a preferred viewing location **(i.e. personal surface/application surface)**, which makes the object appear much closer and therefore larger **(i.e. 3 times larger) (Robertson Claim 10)**

With respect to claim 5 and 8,

- As the graphical representations of the objects **(i.e. application/personal surface)** are moved about the landscape **(i.e. to personal/application surface)**, the present invention may employ perspective views (perceived image scaling with distance), partial image occlusion, simulated shadows, and/or spatialized audio to enhance the three-dimensional effect of the plane or landscape **(i.e 2/3 or application/personal portion) (Robertson Specs Col 28 lines 12-18)**

With respect to claim 10,

- Further, a pop-up title bar 1004 **(i.e. objects displayed at an active size)** may be provided over the active object thumbnail 806'. **(Robertson Specs Col 13 lines 38-40, Drawing Fig 10A/806)** It would be inherent that an inactive object will be smaller than the active (e.g. pop-up title bar) object

With respect to claim 11,

- The present invention may employ some type of visual indication, such as a colored halo around thumbnails of related objects for example, of related

objects. This visual indication (**i.e. visual intensity**) may be rendered continuously or, alternatively, upon an event, such as when an **object** thumbnail is made "**active**". (**Robertson Specs Col 7 lines 33-38**) It would be inherent that an interactive object will have less or no visual effect.

With respect to claim 12,

- The present invention may use pop-up title or information bars for permitting a user to discern more about the object represented by a low resolution image (**i.e. inactive objects which are semitransparent**) (**Robertson Specs Col 6 lines 40-44**)

With respect to claim 13, 14, and 15,

- an object thumbnail(**i.e. application/personal portion**) is "selected" (**i.e. active**)/**902**, an animation, taking on the order of one second, may be used to move the object thumbnail from its position to a closer location (**i.e. in a display**)and use the larger high resolution thumbnail (**i.e. larger than the volume of the (i.e. personal/application transition portion/804)**) so that the user perceives the object as moving towards them (**Robertson Specs Col 14 lines 17-23, Drawing Fig 9/902, Fig9/804**) It is inherent that as the object (**application/personal portion**) moves closer the size will be 1/3 as large, 3 times a large, or larger)

(10) Response to Argument

A Regarding claim 1, Appellant argues Robertson does not teach any interaction with a device moveable in three dimensions or changing the interface characteristics based on motion of a cursor into a range of coordinates in z-dimension.

Examiner respectfully disagrees, Robertson specifically discloses a three-dimensional user interface for managing documents (Col. 5 lines 55-57) and permitting users to drag documents in a the X-Y plane and pull documents in the Z dimension (Col. 5 lines 57-67). Note the drag and pull operations are actions performed by an input device. Robertson discloses mapping two dimensional inputs, such as moving a mouse on a mouse pad, to a three dimensional movement on the simulated three-dimensional display (Col. 7 lines 5-12, Col. 9 lines 60-63). Again, Robertson discloses that the two-dimensional aspect of the input is referring to moving a mouse on a mouse pad which permits the user to move the input device to operate on a three dimensional environment/display. Examiner sees no difference between Robertson's three dimensional movements and the applicant's range of motions in three-dimensions. Furthermore, Robertson discloses a cursor location field for storing a two dimensional (x, y dimension) or virtual three dimensional locations (X, Y, Z dimension) of a cursor (Col. 15 lines 17-20, 55-67, Col. 1-5). Appellant argues there is no teaching in Robertson of the use of an input device that is moveable in **three physical dimensions**; however the claim does not state a physical dimension. Furthermore appellant argues Robertson does not teach "changing the interface characteristics", however "changing the interface characteristics" is not disclosed in the claims.

Robertson's input device is indeed a device with a physical range of motion in two dimensions.

While the Specification of this application discloses, at least on page 12, lines 25-27, "...the interaction environment can comprise three dimensions, for example comprising three dimensional buttons or controls and three-dimensional haptic feedback." (emphasis added) and on page 14, lines 20-22, "...The user can interact with the domains using an input device movable in three dimensions; x-device, y-device, and z-device..." (emphasis added).

Thus, it does not seem that the input device, as disclosed, has 3-D physical motions. However, the claim language does not reflect this.

Furthermore appellant argues Robertson does not teach "changing the interface characteristics", however "changing the interface characteristics" is not disclosed in the claims. Examiner respectfully disagrees.

While the Specification of this application discloses on page 6 lines 17 and 18 "While in the personal domain, the user can be presented with an interface having characteristics distinct from those of the application domain", "changing display as the active domain changes" on page 10 line 3, and "...The user can switch the active domain to be the personal domain by moving the cursor toward the bottom of the application portion of the display" on page 10 lines 9 and 10.

Robertson discloses "simulating a plane located and oriented in three-dimensional space, or other three dimensional landscape on which the object thumbnails may be manipulated" (i.e. changing the interface characteristics) and "as the

object thumbnails are moved about the landscape...employ perspective views (perceived image scaling with distance), partial image occlusion, shadows, and/or spatialized audio (i.e. interface characteristics) to reinforce the simulated three-dimensional plane or landscape". Furthermore Robertson discloses "rendering a visual boundary for example, object thumbnails which are arranged, by the user, relatively close to one another....Alternatively, objects may be related by an explicit selection or designation by a user or based on a property (e.g., age, storage location, etc.) of an object...and employ some type of visual indication (i.e. interface characteristics), such as a colored halo around thumbnails of related objects for example, of related objects. This visual indication may be rendered continuously or, alternatively, upon an event, such as when an object thumbnail is made "active". (Col. 7 lines 26-43).

Therefore Robertson provides a visual indication (i.e. interface characteristics) when an object thumbnail (i.e. domain) is active to indicate the user has moved into an inactive object thumbnail to an active domain or vice versa (i.e. application to personal defined range).

B Regarding claim 2-15, Appellant argues Robertson fails to teach changing the interface characteristics based on motion of a cursor into a range of coordinates in z-dimension and an interaction with a device moveable in three dimensions.

Examiner respectfully disagrees, as previously stated above, Robertson specifically discloses a three-dimensional user interface for managing documents (Col. 5 lines 55-57) and permitting users to drag documents in a the X-Y plane and pull documents in the Z dimension (Col. 5 lines 57-67). Note the drag and pull operations

are actions performed by an input device. Robertson discloses mapping two dimensional inputs, such as moving a mouse on a mouse pad, to a three dimensional movement on the simulated three-dimensional display (Col. 7 lines 5-12, Col. 9 lines 60-63).

Furthermore appellant argues Robertson does not teach “changing the interface characteristics”, however “changing the interface characteristics” is not disclosed in the claims. Examiner respectfully disagrees.

While the Specification of this application discloses on page 6 lines 17 and 18 “While in the personal domain, the user can be presented with an interface having characteristics distinct from those of the application domain”, “changing display as the active domain changes” on page 10 line 3, and “....The user can switch the active domain to be the personal domain by moving the cursor toward the bottom of the application portion of the display” on page 10 lines 9 and 10.

Robertson discloses “simulating a plane located and oriented in three-dimensional space, or other three dimensional landscape on which the object thumbnails may be manipulated” (i.e. changing the interface characteristics) and “as the object thumbnails are moved about the landscape...employ perspective views (perceived image scaling with distance), partial image occlusion, shadows, and/or spatialized audio (i.e. interface characteristics) to reinforce the simulated three-dimensional plane or landscape”. Furthermore Robertson discloses “rendering a visual boundary for example, object thumbnails which are arranged, by the user, relatively close to one another....Alternatively, objects may be related by an explicit selection or

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designation by a user or based on a property (e.g., age, storage location, etc.) of an object...and employ some type of visual indication (i.e. interface characteristics), such as a colored halo around thumbnails of related objects for example, of related objects. This visual indication may be rendered continuously or, alternatively, upon an event, such as when an object thumbnail is made "active". (Col. 7 lines 26-43).

Therefore Robertson provides a visual indication (i.e. interface characteristics) when an object thumbnail (i.e. domain) is active to indicate the user has moved into an inactive object thumbnail to an active domain or vice versa (i.e. application to personal defined range).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

BRANDON PARKER

Examiner, Art Unit 2174

Conferees:

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174

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